

Table 6-6. Summary of Potential Impacts From East Yard SWMUs and AOCs

SWMU/AOC	<100' from PB <sup>1</sup> ?	Has Mobile NAPL Been Measured?	Have Petroleum-Impacted Soils Been Observed?	Have COCs <sup>2,3,4</sup> > RDCSCC Been Detected in Surface Soils (0-2')?	Have COCs > Residential Direct Contact Criteria Been Detected in Subsurface Soils (>2')?	Have COCs > Industrial Direct Contact Criteria Been Detected in Surface Soils (0-2')?	Have COCs > Industrial Direct Contact Criteria Been Detected in Subsurface Soils (>2')?	Have COCs > IGWSCC Been Detected in Unsaturated Soils?	Have COCs > Criteria Been Detected in Native Soils (other than naturally occurring iron?)	Have COCs <sup>5</sup> > Groundwater Criteria Been Detected?	Have Surface Water/Sediments Been Potentially Impacted?	Comments/ Recommendations
SWMU 3 – East Yard Basin	-- <sup>6</sup>	--	--	--	--	--	--	--	--	--	--	Not included in Full RFI; currently undergoing closure.
SWMU 8 – TEL Burial	Yes	No	Yes	Benzo(a)pyrene: 0.68  Lead: 3,210 TOL: 125	Benzene: 750 Benzenethiol: 90E Cyclohexane: 150 Ethylbenzene: 170 Hexane (TIC): 140J Toluene: 2,400 Xylene: 2,300  Benzo(a)pyrene: 0.94 DEHP <sup>7</sup> : 1,300  Lead: 14,5000NE TOL: 2,400	Benzo(a)pyrene: 0.68  Lead: 3,210 TOL: 125	Benzene: 750 Benzenethiol: 90E Cyclohexane: 150 Hexane (TIC): 140J Toluene: 2,400 Xylene: 2,300  Benzo(a)pyrene: 0.94 Bis(2 ethylhexyl) phthalate: 1,300 TOL: 2,400 Lead: 14,5000NE	Benzene: 40 Ethylbenzene: 170 Xylene: 810	Benzo(a)pyrene: 0.83  TOL: 13.2JB Lead: 15,900	1,4-Dichlorobenzene: 250 Benzene: 700 Chlorobenzene: 580 Methylcyclohexane: 100 MTBE: 150  2-4-Dimethylphenol: 160JX 2-Methylnaphthalene: 180 DEHP: 170 Naphthalene: 310 Unknown TICS >100  Arsenic: 37 Lead: 172	Unknown	Include in CMS (soils and groundwater)
SWMU 9 – TEL Burial	No	No	No	No	No	No	No	No	No	Benzene: 29	No	Benzene in groundwater likely associated with LNAPL area EY3; TEL not detected.  NFA (soils only). Include in CMS (site-wide groundwater)
SWMU 10 –TEL burials	No	No	Yes	Benzo(a)pyrene: 2.8J and other PAHs  Lead: 10,700 TOL: 38.6	Benzene: 10 Benzenethiol: 99E  Arsenic: 73.8 Copper: 1,000 Lead: 41,600 Nickel: 294 TEL: 780	Benzo(a)pyrene: 2.8J and other PAHs  Lead: 10,700 TOL: 38.6	Benzene: 10 Benzenethiol: 99E  Arsenic: 73.8 Copper: 1,000 Lead: 41,600 TEL: 780	Benzene: 10	No	Benzene: 490  Aniline (TIC): 38J	No	Include in CMS (soils and groundwater)
SWMU 25 – TEL Weathering Area	Yes	No	No	No	No	No	No	No	No	No	No	Unconfirmed TEL weathering area;  NFA (soils and groundwater)
SWMU 26 – TEL Weathering Area	Yes	No	Yes	Benzo(a)pyrene: 2 and other PAHs  Antimony: 26.9 Arsenic: 50.7 Lead: 531	TOL: 13.1	Benzo(a)pyrene: 2  Arsenic: 50.7	TOL: 13.1	No	No	2-Mercaptobenzothiozole (TIC): 5J  Arsenic: 82 Thallium: 67	Possible	SWMU 26 immediately downgradient of EY4B LNAPL area;  Resample S846 (15-15.5' bgs) for TOL, if not detected; combine with LNAPL area EY4B and remove SWMU 26 from Permit.
SWMU 32 PCB Waste Storage Building	No	--	--	--	--	--	--	--	--	--	--	NFA per HSWA permit

<sup>1</sup>PB: Property boundary

<sup>2</sup>COCs do not include naturally occurring metals (aluminum, calcium, iron, magnesium, manganese, potassium, and sodium, sulfate or methane).

<sup>3</sup>All soil concentrations listed in the table are reported in mg/kg and represent maximum concentrations detected in applicable soil samples at the SWMU/AOC.

<sup>4</sup>Multiple PAHs are usually detected in samples above applicable delineation criteria, but only the maximum concentration for benzo(a)pyrene is listed in this summary table, with the following exception: specific PAHs are listed if benzo(a)pyrene was not detected in a sample above the applicable delineation criterion, but concentrations of other PAHs were detected above their respective delineation criteria.

<sup>5</sup>All water concentrations listed in the table are reported in µg/L and represent maximum concentrations detected in applicable groundwater samples at the SWMU/AOC (data from hydropunch samples are not included, unless there is no nearby monitoring well available for evaluation).

<sup>6</sup>-- Evaluation could not be made, no applicable samples.

<sup>7</sup>DEHP: bis(2ethylhexyl)phthalate

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SWMU 36 – Oil/Water Separator	Yes	No	No	Benzo(a)pyrene: 2.5 and other PAHs  Arsenic: 26.7 Lead: 425	Iron: 34,800	Benzo(a)pyrene: 2.5  Arsenic: 26.7	No	No	No	No	No	Include in CMS (soils only)
SWMU 42 – East Yard Crude Slab	No	Yes	Yes	No	Benzene: 4.97 TPH: 24,700	No	TPH: 24,700	Benzene: 4.97	No	Bis(2ethylhexyl)phthalate: 310  Arsenic: 26.6	No	LNAPL IRM currently in place, include in CMS
SWMU 45 – Surface Impoundment	--	--	--	--	--	--	--	--	--	--	--	NFA per HSWA permit
AOC 6B – Oily Material	No	Yes	Yes	--	--	--	--	--	--	--	Possible	AOC 6B is within EY4A LNAPL area, recommend AOC 6B be incorporated into EY4A LNAPL area and removed from Permit
AOC 6C – Oily Material	Yes	No?	Yes	Antimony: 17.6J Arsenic: 26.3 Lead: 472	No	Arsenic: 26.3	No	No	No	Arsenic: 14.9 Lead: 291	No	Limited impacts, if any, recommend NFA
AOC 13 – Oily Fill Material	Yes	No	Yes	No	Bis(2-ethylhexyl)phthalate: 58  Arsenic: 31	No	Arsenic: 31	No	Arsenic: 31	Metals only in hydropunch sample—not representative of ambient groundwater	Possible	NFA (soils and groundwater)
AOC 14 – GWQAP Oily Fill Area	Yes	Yes	Yes	Arsenic: 22.3	Benzene: 36  Benzo(a)pyrene: 0.91J and other PAHs  Arsenic: 83.2 Lead: 901	Arsenic: 22.3	Benzene: 36  Benzo(a)pyrene: 0.91J  Arsenic: 83.2 Lead: 901	No	No	Arsenic: 82 Thallium: 67	Possible	Much of AOC 14 is within the EY4B LNAPL area, recommend AOC 14 be incorporated into EY4B LNAPL area and removed from AOC list
AOC 16 – OWSS (EY1)	Yes	Yes	Yes	Antimony: 161 Lead: 977	Arsenic: 38.7	Lead: 977	Arsenic: 38.7	Naphthalene: 170	No	Benzene: 100 2-methylpentane: 180J Bis(2ethylhexyl)phthalate: 310 Arsenic: 79.2		EY1 LNAPL area, include in CMS (soils and groundwater)
AOC 16 – OWSS (EY2)	Yes	Yes	Yes	No	No	No	No	Benzene: 2.4	--	No		Part of EY2 is within EY4A LNAPL area; include in CMS (soils and groundwater)
AOC 16 - OWSS (EY3)	Yes	Yes	Yes	--	--	--	--	--	--	--		EY 3 LNAPL area; include in CMS
AOC 16 - OWSS (EY4)	Yes	Yes	Yes	Benzo(a)pyrene: 1.3J and other PAHs  Antimony: 15.6 mg/kg Arsenic: 60.9	Benzene: 29 TPH: 14,000  Benzo(a)pyrene: 38 (and other PAHs)  Arsenic: 69.9 Antimony: 40.4 Lead: 831	Benzo(a)pyrene: 1.3J  Arsenic: 60.9	Benzene: 29 TPH: 14,000  Benzo(a)pyrene: 38 (and other PAHs)  Arsenic: 69.9 Lead: 831	Benzene: 29	No	Benzene: 29  Arsenic: 41.1		EY4A and EY4B LNAPL areas; include in CMS (soils and groundwater)
AOC 16 - OWSS (EY5)	Yes	No	Yes	Benzo(a)pyrene: 1.1J  Arsenic: 28.9	Benzo(a)pyrene: 0.69J  Antimony: 22.6J Arsenic: 41.7	Benzo(a)pyrene: 1.1J  Arsenic: 28.9	Benzo(a)pyrene: 0.69J  Arsenic: 41.7	No	No	Arsenic: 104		Include in CMS (soils and groundwater)
AOC 16 - OWSS (EY6)	Yes	No	No	No	No	No	No	No	No	Antimony: 69.2	No	Include in CMS (groundwater only)
AOC 26 – East Yard Bunker Slab	No	Yes	Yes	Benzene: 7.1  Benzo(a)pyrene: 1J and other PAHs  Arsenic: 31.1	Benzene: 19  Benzo(a)pyrene: 1J and other PAHs  Arsenic: 60.3	Benzo(a)pyrene: 1J  Arsenic: 31.1	Benzene: 19  Benzo(a)pyrene: 1J  Arsenic: 60.3	Benzene: 19	No	Benzene: 9  Arsenic: 41.1	Possible	AOC 26 is within the EY4B LNAPL area, recommend AOC 26 be incorporated into EY4BLNAPL area and removed from Permit

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AOC 27 – Tank 777 Pipeway	No	No	No	No	Benzene: 11  Arsenic: 23.9	No	Arsenic: 23.9	Benzene: 11	No	Benzene: 100 2-Methylpentane (TIC): 180J Arsenic: 79.2 Cobalt: 121	No	Include in CMS (soils and groundwater)
AOC 28 – Asphalt Plant Tanks	No	Yes	Yes	Benzo(a)pyrene: 0.75 and other PAHs	--	Benzo(a)pyrene: 0.75	--	--	--	No	No	AOC 28 is an identified LNAPL area, but LNAPL is not recoverable; include in CMS (soils only)
AOC 29 – 5 Berth	Yes	Yes	Yes	--	--	--	--	--	--	Benzene: 4J  Carbazole: 11 Naphthalene: 470J	Possible	AOC 29 is an identified LNAPL area; include in CMS
AOC 31 – Tank 772 Pump Load Structure	No	No	Yes	Antimony: 51.8 Arsenic: 39.8 Lead: 1,280	Benzene: 7.1  Arsenic: 58.6 Lead: 575	Arsenic: 39.8 Lead: 1,280	Arsenic: 58.6	Benzene: 7.1 Xylenes: 150	Benzene: 2.4 Xylene: 110	4-Methylphenol: 120 Benzene: 6,300 Cyclohexane: 440 Ethyl benzene: 960 Methylcyclohexane: 260 Xylene: 2,700  Arsenic: 17.7	No	Include in CMS (soils and groundwater)
AOC 35 – Tank Basin 771	Yes	No	No	Antimony: 15.5J Arsenic: 21.3	Arsenic: 23.7	Arsenic: 21.3	Arsenic: 23.7	No	No	No	No	Recommend NFA (soils and groundwater)